

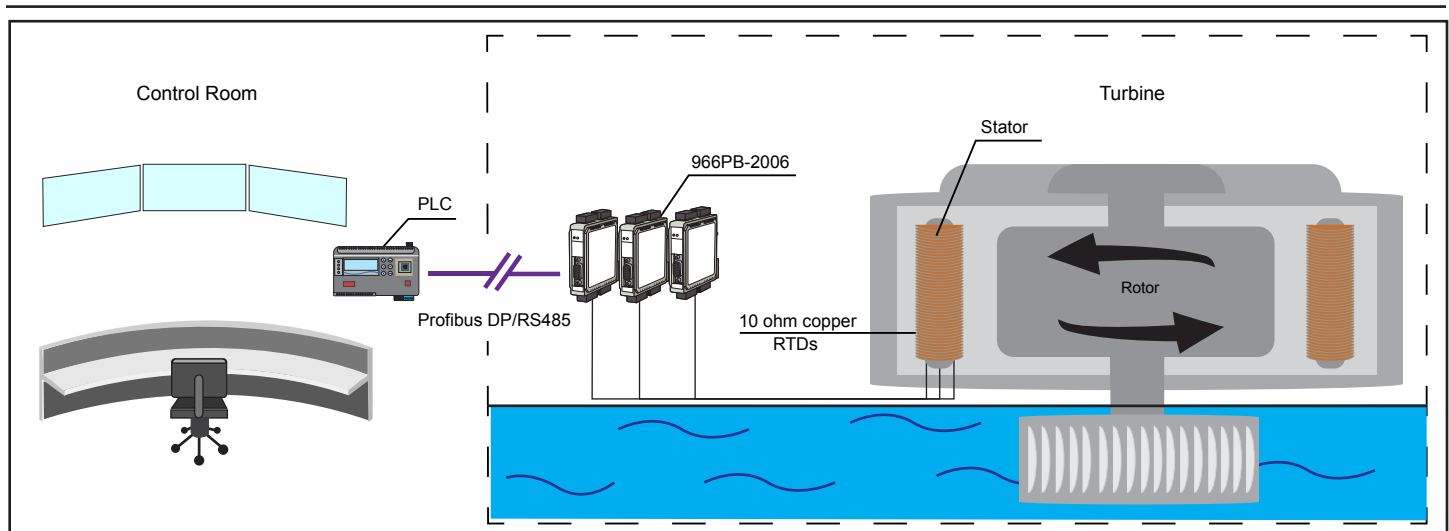
# Application Note: Monitoring Stator Temperatures with Remote Profibus I/O

## Defining the Problem:

A Power Plant has Hydroelectric Generators with 10 ohm copper 3 wire RTDs embedded in the stator motor windings. The RTDs are far away from a PLC in the control room. The long distance is picking up noise that is interfering with their measurements.

## System Requirements:

A Siemens PLC can communicate using Profibus DP / RS485. Install Remote Profibus I/O, Class 1 Div 2 approved, close to the RTDs. Shorter RTDs, with proper shields and grounding techniques, will significantly reduce the noise for more accurate measurements.



## Implementing the Solution:

1. Select a Slave Address and configure the 966PB-2006 parameters using a GSD file. Download the file into the PLC.
2. Wire the RTDs, power and Earth Ground.
3. Program the PLC for 50 to 80°C normal RTD temperature ranges.
4. Validate the measurements.

## Featured Products:

[966PB-2006](#)

## Why Acromag:

The Profibus Remote I/O are PNO-certified for interoperability with Profibus equipment ensuring ease of set up and operation. The products are fully isolated and engineered with a Siemens SPC3 intelligent ASIC providing reliable Profibus communications.